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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,259

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EXAMINER

CHOWDHURY, AFROZA Y

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

12/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,259	Applicant(s) SEKIGUCHI, KANETAKA	
	Examiner AFROZA Y. CHOWDHURY	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16, 18 and 20-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 18 and 20-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on **August 29, 2008** has been entered. Claims 16, 18, and 20-37 are currently pending. Applicants amended and newly added claims are addressed herein below.

Drawings

2. Figures 1 and 41 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2629

4. Claims 16, 20-22, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US Patent 7,184,012) in view of **Kurashima et al.** (US Patent 6,958,184).

As to claim 16, Kim discloses a display apparatus comprising:

a first display panel (figs. 3(200), 7) including a first electro-optic display medium, a first electrode-line group having a plurality of electrode lines to supply a driving signal to the first electro-optic display medium (figs. 3, 7, abstract, col. 3, lines 40-50, col. 4, lines 22-53), and

an active element (fig. 3(100), operator) that controls supply of the driving signal to the first electro-optic display medium (figs. 3, 6, col. 4, lines 22-53);

a second display panel (figs. 3(300), 8) including a second electro-optic display medium, and a second electrode-line group having a plurality of electrode lines to supply a driving signal to the second electro-optic display medium (figs. 3, 8, abstract, col. 3, lines 40-50, col. 4, lines 22-53); and

a connecting member that connects the first display panel and the second display panel (fig. 3), wherein

at least a part of the electrode lines of the first electrode-line group are connected to a part or all of the electrode lines of the second electrode-line group via the connecting member (fig. 3, col. 3, lines 40-50, col. 4, lines 22-53).

Kim does not explicitly teach at least one of the first and second display panels comprises an inter-panel switching element that is provided between the electrode lines

Art Unit: 2629

of the first display panel and the electrode lines of the second display panel that are connected to each other, and controls passage and non-passage of the driving signal to said second panel.

Kurashima et al. teaches the first and second display panels comprises an inter-panel switching element that is provided between the electrode lines of the first display panel and the electrode lines of the second display panel that are connected to each other, and controls passage and non-passage of the driving signal to said second panel (fig. 3, col. 3, lines 20-26, col. 14, lines 42-47).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate the idea of controlling signal supply to display panel into Kim's mobile to make a display apparatus comprising an inter-panel switching element that is provided between the electrode lines of the first display panel and the electrode lines of the second display panel that are connected to each other and to control passage and non-passage of the driving signal in order to reduce power consumption.

All the limitations in claim 21 is rejected the same as claim 16 above except,

Kim discloses a display apparatus wherein a driving circuit that supplies the driving signal is connected to either of the first display panel and the second display panel, of which a display area is smaller (col. 5, lines 32-38).

All the limitations in claim 22 is rejected the same as claim 16 above except,

Kim teaches a display apparatus wherein a driving circuit that supplies the driving signal is connected to the connecting member that connects the first display panel and the second display panel (fig. 3).

Claims 20, 26, and 28 are rejected the same as claim 16 above.

5. Claims 23, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US Patent 7,184,012) in view of **Kurashima et al.** (US Patent 6,958,184) and in further view of **Kumakura et al.** (US Pub. 2003/0102466).

As to claims 23, 24, and 25, Kim (as modified by Kurashima et al.) teaches a display apparatus comprising: a first display panel including a first electro-optic display medium and a second display panel including a second electro-optic display medium including flexible wire (figs. 3(200, 300), 7, 8, abstract, col. 5, lines 32-43 in Kim).

Kim (as modified by Kurashima et al.) does not specifically teach a driving circuit that supplies the driving signal is connected using an anisotropic conductive-film made of an electric conductor and an adhesive.

Kumakura et al. teaches a mobile telephone using anisotropic conductive adhesive film (ACF) ([0004]).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to include the idea of Kumakura et al. of using anisotropic

Art Unit: 2629

conductive adhesive film into the mobile of Kim (as modified by Kurashima et al.) to make a mobile with flexible circuit board including flexible wire.

6. Claims 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim** (US Patent 7,184,012) in view of **Kurashima et al.** (US Patent 6,958,184) and in further view of **Bickerton** (US Pub. 2003/0025616).

As to claim 30, Kim (as modified by Kurashima et al.) discloses a display apparatus comprising: two liquid crystal display panels (figs. 3(200, 300), 7, 8, col. 4, lines 23-32 in Kim).

Kim (as modified by Kurashima et al.) does not specifically teach whether the liquid crystal display panels are active-matrix liquid-crystal-display or formed with organic light emitting diode.

Bickerton teaches handheld device formed with organic light emitting diode ([0025]).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to use Bickerton's idea of making handheld device formed with organic light emitting diode to modify the mobile of Kim (as modified by Kurashima et al.) to make a mobile where the first display panel is an active-matrix liquid-crystal-display panel and the second display panel is formed with an organic light-emitting diode for low power.

Claim 34 can also be rejected the same as claim 30.

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim** (US Patent 7,184,012) in view of **Kurashima et al.** (US Patent 6,958,184) and in further view of **Everitt** (US Pub. 2002/0183945).

As to claim 32, Kim (as modified by Kurashima et al.) discloses a display apparatus comprising: two liquid crystal display panels (figs. 3(200, 300), 7, 8, col. 4, lines 23-32 in Kim).

Kim (as modified by Kurashima et al.) does not explicitly teach whether the liquid crystal display panels are active-matrix with organic light emitting diode or passive-matrix liquid-crystal-display panels.

Everitt teaches cellular phone formed with active-matrix organic light emitting diode (OLED) ([0011]).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate Everitt's idea of using active-matrix OLED in cellular phone into the mobile of Kim (as modified by Kurashima et al.) to make a display apparatus wherein the first display panel is an active-matrix display panel formed with an organic light-emitting diode and the second display panel is a passive-matrix liquid-crystal-display panel for low power and low cost.

Art Unit: 2629

8. Claims 18, 27, 29, 31, 33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim** (US Patent 7,184,012) in view of **Kurashima et al.** (US Patent 6,958,184) and in further view of **Hatae** (US Pub. 2002/0060947).

As to claim 18, Kim (as modified by Kurashima et al.) teaches a display apparatus comprising: a first display panel including a first electro-optic display medium and a second display panel including a second electro-optic display medium (figs. 3(200, 300), 7, 8, abstract, col. 4, lines 22-37 in Kim).

Kim (as modified by Kurashima et al.) does not teach specifically teach a protection switching element that is provided between the electrode lines of the first display panel and the electrode lines of the second display panel that are connected to each other, and disperses static electricity generated in the electrode lines.

Hatae teaches a logic circuit to reduce static current in cellular phone ([0083]).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to use Hatae's idea of reducing static current in cellular phone to modify the mobile of Kim (as modified by Kurashima et al.) to make a display apparatus including a protection switching element that disperses static electricity generated in the electrode lines.

Claims 27, 29, 31, 33, and 35 are rejected the same as 26, 28, 30, 32, and 34, respectively, above.

Art Unit: 2629

9. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim** (US Patent 7,184,012) in view of **Kurashima et al.** (US Patent 6,958,184) and in further view of **Reyes et al.** (US Patent 6,931,265).

As to claim 36, Kim (as modified by Kurashima et al.) teaches a display apparatus comprising: a first display panel (figs. 3(200), 7, in Kim) including a first electro-optic display medium and a second display panel (figs. 3(300), 8, in Kim) including a second electro-optic display medium (abstract, col. 4, lines 22-37, in Kim).

Kim (as modified by Kurashima et al.) does not explicitly teach a third display panel including a third electro-optic display medium.

Reyes et al. teaches a third display panel (fig. 1A).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to include third display panel as Reyes et al. into the mobile of Kim (as modified by Kurashima et al.) to make a display apparatus with a third display panel including a third electro-optic display medium, and a third electrode-line group having a plurality of electrode lines to supply a driving signal to the third electro-optic display medium; and a second connecting member that connects the third display panel with either of the first display panel and the second display panel, wherein a part or all of the electrode lines of the third electrode-line group are connected to the electrode lines of the first electrode-line group or the electrode lines of the second electrode-line group via the second connecting member.

Art Unit: 2629

As to claim 37, Kim (as modified by Kurashima et al. and Reyes et al.) teaches a display apparatus comprising: a first display panel (figs. 3(200), 7, in Kim), a second display panel (figs. 3(300), 8, in Kim), and a third display panel (fig. 1A, in Reyes et al.).

Kim (as modified by Kurashima et al. and Reyes et al.) does not explicitly teach a fourth display panel including a fourth electro-optic display medium.

Reyes et al. teaches a third display panel (fig. 1A).

However, it is obvious to one skill in the art to recognize a display apparatus comprising: a fourth display panel including a fourth electro-optic display medium, and a fourth electrode-line group having a plurality of electrode lines to supply a driving signal to the fourth electro-optic display medium; and a third connecting member that connects the fourth display panel with one of the first display panel, the second display panel, and the third display panel, wherein a part or all of the electrode lines of the fourth electrode-line group are connected to the electrode lines of the first electrode-line group, the electrode lines of the second electrode-line group, or the electrode lines of the third electrode-line group via the third connecting member.

Response to Arguments

10. Applicant's arguments with respect to claims 16, 18, and 20-37 have been considered but are moot in view of the new ground(s) of rejection.

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFROZA Y. CHOWDHURY whose telephone number is (571)270-1543. The examiner can normally be reached on 7:30-5:00 EST, 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC
12/3/2008

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